

Active Recombinant Mouse Sirt3 protein, His-tagged

Cat. No. Sirt3-1375M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Mouse Sirt3 protein(Q8R104)(5-257 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Mouse
Source	E.coli
ProteinLength	5-257 aa
Form	100mM NaHCO ₃ , 500mM NaCl, pH8.3, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	Sirtuin 3 (SIRT3) also known as NAD-dependent deacetylase sirtuin-3 is a member of the mammalian sirtuin family of proteins. SIRT3 is a soluble protein located in the mitochondrial matrix, and contains a mitochondrial processing peptide at the N-terminus. It is a key regulator of succinate dehydrogenase (SDH), which catalyzes the oxidation of succinate to fumarate. Increased succinate concentrations and the specific G protein-coupled receptor 91 (GPR91) are involved in the activation of hepatic stellate cells (HSCs). SIRT3 agonists could help treat metabolic disorders such as obesity, metabolic syndrome and type 2 diabetes. Besides, Dihydrolipoyl Transacetylase (DLAT) has been identified as an interactor of SIRT3, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse SIRT3 and recombinant mouse DLAT. Briefly, SIRT3 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to DLAT-

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coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-SIRT3pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µl stop solution to the wells and read at 450nm immediately. The binding activity of SIRT3 and DLAT was shown, and this effect was in a dose dependent manner.

Molecular Mass 32.2kDa

Purity > 90%

Storage Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.

Reconstitution Reconstitute in ddH₂O to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name Sirt3 sirtuin 3 (silent mating type information regulation 2, homolog) 3 (*S. cerevisiae*) [*Mus musculus*]

Official Symbol Sirt3

Synonyms SIRT3; sirtuin 3 (silent mating type information regulation 2, homolog) 3 (*S. cerevisiae*); NAD-dependent deacetylase sirtuin-3; mSIR2L3; SIR2-like protein 3; SIRT3L mitochondrial; mitochondrial protein lysine deacetylase; silent mating type information regulation 2, (*S. cerevisiae*, homolog)-like 3; Sir2I3; A1848213; 2310003L23Rik;

Gene ID 64384

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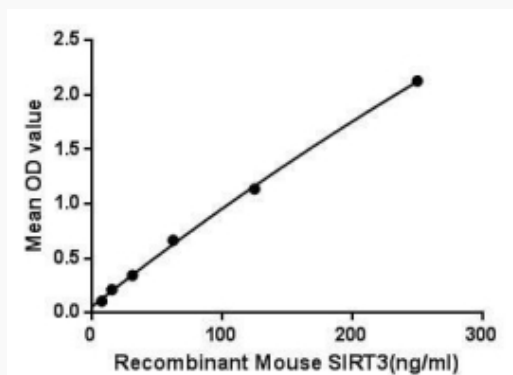
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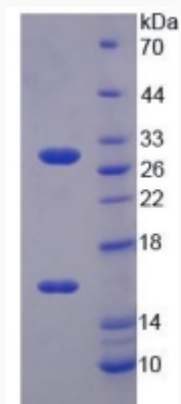
mRNA Refseq NM_001127351

Protein Refseq NP_001120823

Activity



SDS-PAGE



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